

# Memorandum

Date : June 18, 2001

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From : California Energy Commission - Susan Lee  
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Subject : **WOODLAND GENERATING STATION 2 (01-SPPE-1) Staff Issue Identification Report**

Attached is our Issue Identification Report for the Woodland Generating Station 2 (01-SPPE-1). This report serves as a preliminary scoping document, identifying issues that we will address in detail in our Initial Study for the project. We will present the issues report at the Committee's scheduled Informational Hearing on June 28, 2001.

Attachments

cc: 01-SPPE-1 Proof of Service List  
Woodland Generation Station 2 Agency List



# **Issue Identification Report**

## **Woodland Generating Station 2 (01-SPPE-1)**

**June 18, 2001**

**CALIFORNIA ENERGY COMMISSION**  
**Energy Facilities Siting and Environmental Protection Division**



# ISSUE IDENTIFICATION REPORT

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# **ISSUE IDENTIFICATION REPORT**

## **Woodland Generating Station 2 (01-SPPE-1)**

This report has been prepared by the California Energy Commission (Energy Commission) staff to inform the Committee and all interested parties of the potential issues that have been identified in the case thus far. These issues have been identified as a result of our site visits, discussions with federal, state and local agencies, and our review of the Small Power Plant Exemption application, Docket Number 01-SPPE-1. The Issue Identification Report contains a project description, a summary of potentially significant environmental impacts, a discussion of transmission system engineering issues related to the project scope, and a discussion of project scheduling issues.

### **PROJECT DESCRIPTION**

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On May 4, 2001, the Modesto Irrigation District (MID) filed an application for a Small Power Plant Exemption (SPPE) for the Woodland Generating Station 2 (WGS2). The proposed WGS2 will be an 80-megawatt (MW) nominal natural gas-fired, combined-cycle generating facility. The WGS2 facility will occupy approximately a 2.5-acre portion of a 7-acre site, which includes an existing 49.4 MW generating facility, Woodland 1. The existing plant and adjacent site are located at Section 30, Township 3 South, Range 9 East in Stanislaus County and are situated at 920 Woodland Avenue in Modesto, California.

The proposed power plant will use either a convention drum-type heat recovery steam generator (HRSG) or a once-through steam generator (OTSG). The plant would use a single GE LM6000 enhanced SPRINT combustion turbine generator (CTG) and a single condensing steam turbine generator (STG). The CTG would only fire natural gas.

Approximately 1.2 miles of 69-kV subtransmission line improvements would be required starting from the existing facility and ending at MID's Enslens Substation, about one mile southeast. The transmission line improvements would be along the existing transmission line route that currently connects Woodland 1 with the substation.

Pacific Gas and Electric Co. (PG&E) would deliver the natural gas required for the proposed power plant through the existing gas line connection to the Woodland 1 plant. However, because of the increased capacity needed to serve WSG2 plant, two segments of gas pipelines would need to be reinforced in San Joaquin County. The gas pipeline enhancements would include approximately 3.25 miles of 12-inch diameter reinforcement to PG&E's Ripon-Modesto Distribution Feeder Main (DFM) that would be located west and south of downtown Ripon. The line improvements would be along three roadways: (a) East West Ripon Road between South Austin Road and Jack Tone Road, (b) along Jack Tone Road between Ripon Road and Doak Road, and (c) along Doak Road between Jack Tone and Vera Roads. The second transmission line enhancement would be to PG&E's Line 108 and would be 3 miles of pipeline between PG&E's McMullian Ranch Mixing Station (located at

East Avenue D and South Airport Way), through agricultural fields to the local Ripon-Modesto DFM at West Ripon Road, just west of South Union Road.

WGS2 would use water transported from Modesto Regional Water Treatment Plant at MID's Reservoir for cooling process make-up and domestic water uses. A new 10-inch underground pipeline be constructed, starting from the existing canal, 'Lateral 4' (near the corner of 9<sup>th</sup> Street and Kansas Avenue), and would run for approximately one mile to the WGS2 site. The new waterline would be buried in or adjacent to Kansas and Graphics Avenues.

The WGS2 project would be equipped with Best Available Control Technology (BACT) to control air pollutant emissions. These controls include a water injection system to reduce the NO<sub>x</sub> emissions from the CTG exhaust, a NO<sub>x</sub> selective catalytic reduction system (SCR), and a continuous emission monitoring system for the exhaust stack. The SCR system uses aqueous ammonia as a reagent for an ammonia injection system and an oxidation catalyst to maintain CO emission limit in all operating conditions.

MID would operate the WGS2 facility to serve residential, industrial, and commercial customers in and around the City of Modesto and in neighboring areas in Stanislaus and San Joaquin Counties. The WGS2 project would provide MID with diversified and competitively priced power to serve customers in MID's jurisdiction.

## POTENTIAL ISSUES

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Public Resource Code section 25541 states "[t]he commission may exempt ... thermal power plants with a generation capacity of up to 100 megawatts and modifications to existing generating facilities that do not add capacity in excess of 100 megawatts, if the commission finds that no substantial adverse impact on the environment or energy resources will result from the construction and operation of the proposed facility or from the modifications." The SPPE process is different from the Application for Certification (AFC) process since the Energy Commission will not certify the project but exempt the project from the certification process. If an exemption is granted, the applicant will need to secure the appropriate licenses and permits for the project from various local, state and federal agencies. The Energy Commission is the lead agency under the California Environmental Quality Act (CEQA).

The SPPE process also uses a different format of analysis from that used in the AFC process. For an SPPE, staff prepares an Initial Study that evaluates whether the project will result in any significant environmental impacts, identifies mitigation measures that will reduce those impacts to less than significant, and will establish proposed conditions of exemption. Staff will use the Environmental Checklist Form contained in CEQA Guidelines Appendix G (California Code of Regulations, Title



14, section 15063 (f))<sup>1</sup> as a guideline for the issues that will be examined in the Initial Study.<sup>2</sup>

This portion of the Issue Identification Report contains staff's preliminary findings regarding the questions posed in the Environmental Checklist Form. The following discussions focus only on those checklist questions where staff has concluded that (a) a "potentially significant impact" may occur, (b) resolution of an issue or issues may cause delay in the schedule, or (c) where staff has insufficient information at this time to reach a conclusion. The Committee should be aware that this report may not include all the significant issues that may arise during the case, as discovery is not yet complete, and other parties have not had an opportunity to identify their concerns.

## ENVIRONMENTAL CHECKLIST

The following sections contain staff's preliminary findings regarding the checklist questions. The Initial Study will provide additional analysis supporting staff's conclusions, description of the recommended mitigation measures and conditions of exemption.

<b>AIR QUALITY<sup>3</sup></b>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation		X		

The Applicant has provided estimates of operational emissions and estimates of ambient air quality impacts using air quality modeling. The modeling results indicate no new violations of air quality standards. The emissions are calculated based on the assumption of implementing Best Available Control Technology (BACT) on the turbines, which are the major source of operational emissions; and the project impacts are further mitigated through the use of required emissions offsets. The Applicant has provided a list of the sources for Emission Reduction Credits (ERCs) obtained and a confidential filing of ERC sources and quantities that are currently being negotiated to offset the project's emissions. Additionally, the Applicant is proposing to offset PM10 emissions<sup>4</sup> using SO<sub>x</sub> ERCs (i.e. interpollutant offset trading). The U.S. Environmental Protection Agency (EPA) has not yet approved the proposed SO<sub>x</sub> to PM10 interpollutant offset ratio. Staff's data request asks that the Applicant document that all required ERCs have been obtained and that San Joaquin Valley Air Pollution Control District (SJVAPCD) and EPA have approved the use of those ERCs.

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<sup>1</sup> [http://ceres.ca.gov/topic/env\\_law/ceqa/rev/appg\\_102698.pdf](http://ceres.ca.gov/topic/env_law/ceqa/rev/appg_102698.pdf)

<sup>2</sup> Staff proposes to add two questions to the environmental check list form. These questions are related to environmental justice and impacts on energy resources.

<sup>3</sup> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to answer the questions in the checklist.

<sup>4</sup> These emissions are respirable particulate matter less than 10 microns in diameter.

<b>CULTURAL RESOURCES</b>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		X		

The records search obtained from the Central California Information Center of the California Historical Resources Information System obtained by the Applicant's consultant showed that no archaeological resources eligible or potentially eligible for the California Register of Historical Resources have been recorded in any of the areas to be affected by the proposed project. However, a field survey of the project area and associated linear routes has not been performed. The Applicant has been requested to perform the survey. Should any archaeological resources be identified as a result of the survey or during construction, the resources will be evaluated for eligibility for the California Register of Historical Resources. If determined eligible, mitigation measures, consisting of either avoidance or data recovery, will reduce the impacts on the archaeological resources to less than significant levels. Thus, there are no known cultural resources issues at this time, but issues could be identified as a result of the field survey or during construction monitoring. It is likely that impacts associated with any such issues could be mitigated to less than significant levels.

<b>AESTHETICS</b>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?		X		

The proposed power plant may have the potential to cause significant visual impacts because of project-created vapor plumes. Due to the level terrain of the immediate site and surrounding landscape, the project site being located in an urban area, and the close proximity of State Route 99, such plumes could potentially be seen over a wide area and by a large number of viewers. Project-related plumes might also contribute to cumulative changes in landscape character and quality in combination with other existing plume sources in the vicinity. A determination of whether or not significant impacts would occur depends upon an analysis of data describing the magnitude, frequency, and duration of visible plumes that could be expected. Staff has issued data requests to obtain this additional information. If it is determined that the proposed project could cause significant visual impacts due to vapor plumes, staff believes those impacts can be mitigated

with existing technologies that reduce the plume by substituting a different cooling tower design (e.g., hybrid or wet/dry cooling) or by modifying modes of plant operation.

The introduction of substantial new lighting on the site, if not fully mitigated, has the potential to adversely affect the nighttime visual environment of the project vicinity. If it is determined that the proposed project would cause significant visual impacts due to night lighting, staff believes those impacts can be mitigated with existing lighting control technology which will be required as conditions of project approval.

<b>TRAFFIC/TRANSPORTATION</b>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?		X		
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?		X		

Based on information presented in the SPPE application, we are unable to identify exactly which roadways will be impacted or if any significant impacts will result with the addition of construction traffic related to the Woodland Generation Station 2 (WGS2). The minimum acceptable level of service standard established by the City of Modesto is LOS D. The roadways that have the most potential to result in traffic impacts are State Route 132 at Carpenter Road, Woodland Avenue (in the immediate vicinity of the WGS2 site), which both currently operate at LOS E, and 9<sup>th</sup> Street (in the immediate vicinity of the WGS2 site) which currently operates at LOS D (according to the SPPE application). Based on a review of the traffic and transportation data presented in the SPPE application, staff is unable to reach a final conclusion whether the project will result in potentially significant impacts. If significant impacts are identified, staff believes that mitigation measures could be developed to reduce or eliminate these impacts. Staff has issued data requests to obtain the additional necessary information.

## **SCHEDULING ISSUES**

Staff has begun its analysis of the potential issues identified above, as well as the other questions raised in the Environmental Checklist Form. The first step in that assessment was the issuing of data requests to the Applicant on May 31, 2001.

Over the next few months, we will conduct publicly noticed workshops to address identified concerns.

Staff's initial findings regarding the major issues discussed above, as well as other environmental findings will be presented in the Draft Initial Study that is expected to be filed by June 29, 2001. After filing the Draft Initial Study, staff will conduct a public workshop to discuss its findings, recommendations and proposed conditions of exemption. Based on these workshop discussions and other information that may be provided, staff will present its conclusions and recommendations in the Final Initial Study filed by July 31, 2001.

<b>Proposed Schedule For the Woodland Generating Station 2 SPPE</b>	
<b>DATE</b>	<b>EVENT</b>
4-May-01	Receive document (SPPE Application)
31-May-01	First set of data requests to applicant
29-Jun-01	Responses due to first set of data requests
28-Jun-01	Site Visit/Information Hearing
5-Jul-01	Staff Publishes Draft Initial Study
12-Jul-01	Workshop to receive comments on Draft Initial Study
23-Jul-01	Staff files Final Initial Study
1-Aug-01	Hearings (dates to be determined)
18-Sept-01	Decision